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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

BY HAND DELIVERY

Mr. William F. Caton
Acting Secretary
Federal Communications Commission
1919 M Street, N.W., Room 222
Washington, D.C. 20554

Re: Claircom Communications Group, L.P.
Comments In ET Docket No. 94-32

Dear Mr. Caton:

Enclosed on behalf of Claircom Communications Group, L.P. ("Claircom") is an original and five copies of comments in the above-referenced docket. Also enclosed is an extra copy to be date stamped and returned to us.

Please direct any inquiries regarding this matter to the undersigned.

Sincerely,

Michael Ray

Tom W. Davidson, P.C.
Michael S. Ray

Enclosure

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)
)
Allocation of Spectrum Below) ET Docket No. 94-32
5 GHz Transferred From)
Federal Government Use)
)
TO: The Commission)

COMMENTS OF CLAIRCOM COMMUNICATIONS GROUP, L.P.

Claircom Communications Group, L.P. ("Claircom"), by its attorneys, hereby files these comments in response to the Notice of Proposed Rulemaking ("Notice") issued by the Federal Communications Commission ("FCC" or "Commission") in the above-captioned proceeding. In this proceeding, the FCC proposes to reallocate 50 megahertz ("MHz") of spectrum in the bands 2390 to 2400 MHz, 2402 to 2417 MHz, and 4660 to 4685 MHz from the federal government to private sector use. In response to a request by In-Flight Phone Corporation ("In-Flight"), the FCC seeks comments on a proposal to allocate a portion of that spectrum (i.e, 2390 to 2400 MHz) for a live, multi-channel broadband audio and video programming service ("AAVS") for airline passengers. As will be set forth below, while Claircom generally supports the allocation of spectrum for a broadband, interactive (two-way) AAVS, Claircom believes the FCC should examine other spectrum options for AAVS before allocating the spectrum proposed by In-Flight for such a new service.

I. INTRODUCTION AND SUMMARY

Claircom is one of three currently operating carriers authorized to provide two-way radiotelephone transmissions on a nationwide basis in the commercial aviation air-ground service.^{1/} Claircom has been actively pursuing the development of interactive communications and information services for airline passengers under an experimental license granted by the FCC (Call Sign KM2XGJ, FCC File No. 3071-EX-PL-92). Claircom's experimental ground-to-air wireless retransmission system is designed to provide live audio and video programming, such as news, sports and weather reports that are not currently available to the flying public. The experimental license authorizes Claircom to provide the service on 930.000 to 930.400 MHz, 901.450 to 901.500 MHz, and 940.700 to 940.750 MHz.

Claircom has been carefully evaluating various options for the delivery of live audio services to aircraft. Thus, for example, a consortium comprised of Claircom and Boeing recently was awarded a contract under the Technology Reinvestment Project^{2/} to develop and demonstrate such broadband capabilities as two-way high-capacity satellite and terrestrial links with aircraft, including the provision of integrated video, audio and data services. Hence, Claircom is keenly interested in the

^{1/} The other two currently operating air-ground licensees are GTE Airfone Incorporated ("GTE") and In-Flight.

^{2/} The Technology Reinvestment Project is a Congressionally-funded multi-agency program under the Defense Advanced Research Project Agency, the U.S. Department of Commerce, the U.S. Department of Transportation, NASA, and the National Science Foundation.

allocation of spectrum by the FCC for a live, multi-channel audio and video programming service like that proposed by In-Flight.

II. CLAIRCOM SUPPORTS THE ALLOCATION OF SUFFICIENT SPECTRUM FOR AUDIO AND VIDEO PROGRAMMING SERVICES FOR AIRLINE PASSENGERS

Claircom generally supports In-Flight's proposal to allocate a portion of the radiofrequency spectrum for a broadband AAVS to be used by commercial air-to-ground providers.^{3/} However, as will be noted below, there are several aspects of In-Flight's proposal that Claircom does not support. In-Flight requests that the FCC allocate 10 MHz of spectrum consisting of 2390 to 2400 MHz to provide AAVS on a nationwide basis. As proposed by In-Flight, an AAVS licensee would divide its bandwidth assignment into six channel blocks of equal size, and each base station would use a single channel block. For example, if an AAVS licensee were assigned the full 10 MHz between 2390 to 2400 MHz, each channel block would be 1.67 MHz wide. With a channel block that is 1.67 MHz wide, an AAVS license could transmit four channels of video programming and 18 channels of audio programming using signal compression technology available today. Base stations would transmit omni-directionally with a maximum effective radiated power of 1,250 watts. Under the In-Flight proposal, an AAVS licensee would obtain nationwide coverage with

^{3/} In-Flight's proposal is contained in its reply comments to the Notice of Inquiry released by the FCC on May 4, 1994 in this proceeding, 9 FCC Rcd 2175 (1994).

about 70 base stations, each of which would be roughly 250 miles from its closest neighbor.

Air-ground channels are allocated a narrow bandwidth of approximately 6 kHz and are wholly inadequate to support such AAVS services as online access to public or private computer networks, video teleconferencing, and live or delayed delivery of video images or other large data files. Therefore, Claircom agrees with In-Flight that AAVS would serve a market that is distinct from and in addition to the market for air-ground services. The existing 2 MHz of spectrum allocated to air-ground service is totally inadequate to provide critical AAVS services to the 500 million passengers that travel in air each year. Without an allocation of additional spectrum, passengers on commercial aircraft will be unable to have access to these essential services. Claircom supports the allocation of a sufficient amount of spectrum to enable air-ground providers to implement a broadband, two-way AAVS service to their customers. However, Claircom believes the FCC should examine other spectrum options for AAVS before allocating the spectrum proposed by In-Flight for such a new service.

If the FCC decides not to allocate a block of spectrum in which several competing AAVS licenses will be able to operate, then Claircom requests the Commission to allocate discrete AAVS channels for the exclusive use of individual air-ground licenses. Claircom recommends that paired channels of 2 MHz each (for a total of 4 MHz per pair) be allocated to ensure that sufficient

spectrum will be available for the development of duplex broadband AAVS services, including video service, to airline passengers.

III. ANY ALLOCATION OF SPECTRUM FOR AAVS SHOULD SUPPORT TWO-WAY BROADBAND COMMUNICATIONS AND ALLOW MULTIPLE, COMPETING PROVIDERS TO DELIVER SERVICE THROUGH DIFFERENT TECHNICAL MEANS THAT ARE NOT TIED TO A SINGLE STANDARD

Claircom has several concerns regarding the specific AAVS model proposed by In-Flight. In-Flight's vision of AAVS is essentially a one-way broadband service. Claircom does not believe it is in the public interest to allocate spectrum for an AAVS service of such limited capability. Rather, Claircom believes that the public interest will be best served by the development of broadband, interactive (two-way) services between the air and ground. The deployment of such a service will best serve the public interest because it will allow the industry to take advantage of the most important developments in communications technology and services. The federal government recognized the importance of broadband, interactive services to the flying public when it selected the Boeing/Claircom consortium to develop standard communications protocols for the provision of such services to aircraft. Claircom was advised by the Technology Reinvestment Project administrators that its proposal was selected because the agencies involved recognized the importance of extending broadband, interactive voice and data communications to aircraft, for both defense and commercial purposes.

Contrary to In-Flight's proposal, Claircom urges that AAVS be authorized within a regulatory framework that will allow multiple, competing carriers to provide AAVS service with different technologies. If the FCC adopts In-Flight's system specific proposal for AAVS, it effectively will prevent competing air-ground carriers like Claircom and GTE from employing different, more efficient and cost effective technologies to deliver AAVS to their customers. Such a result would run counter to the public interest objectives of increased competition and diversity in the provision of air-ground services. Any approach adopted ultimately by the FCC for the allocation and authorization of spectrum for AAVS must enable the delivery of interactive (two-way) broadband communications service through technical means that are not tied to a single standard.

IV. CONCLUSION

Based on the foregoing, Claircom generally supports In-Flight's proposal to allocate spectrum for an AAVS but believes the FCC should examine other spectrum options for AAVS before allocating the spectrum proposed by In-Flight for such a new service. The public interest will best be served by the

authorization of AAVS within a regulatory framework that enables the deployment of a broadband, interactive AAVS by multiple, competing carriers with different technologies.

Respectfully submitted,

CLAIRCOM COMMUNICATIONS GROUP, L.P.

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